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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,916

04/07/2006

Niels Joergen Madsen

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JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER

GHALI, ISIS A D

ART UNIT

PAPER NUMBER

1611

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,916	Applicant(s) MADSEN ET AL.	
	Examiner Isis A. Ghali	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/15/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 14-20, 22-25 and 27-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-13, 21 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/13/2009; 09/20/2006; 07/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-36 are pending.

The receipt is acknowledged of applicants' election filed 10/15/2009; IDS filed 11/13/2009; IDS filed 09/20/2006; and IDS filed 07/24/2006.

Response to Election/Restrictions

1. In the election/restrictions mailed 09/18/2009, the examiner inadvertently inserted the paragraph 17 in page 10 that concerns restriction between product and process. This paragraph is hereby withdrawn.

2. Applicant's election of the following species in the reply filed on 10/15/2009 is acknowledged:

polyvinyl pyrrolidones or copolymers containing polyvinyl pyrrolidones for hydrophilic homopolymer or heteropolymer;

triblock copolymer having formula ABA, diblock copolymer having formula AB, or multiblock or multi arm star-shaped copolymer containing A and B blocks for amphiphilic block copolymer;

polymerized styrene as species for hydrophobic block of the amphiphilic block copolymer;

homopolymer or copolymer of vinylpyrrolidone as species for hydrophilic block of the amphiphilic block copolymer; and

medical device adapted for being attached to the surface of a living being comprising a pressure sensitive adhesive at the surface, which is to be attached to the surface of the living being, claim 26, for formulation.

It is established that the examination of species will be extended to the extent necessary to determine patentability of the Markush-type claim, MPEP 803.02[R-5].

3. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

4. Claims 2-5, 14-20, 22-25, 27-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/15/2009.

Claims 1, 6-13, 21 and 26 are included in the prosecution.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. The claims are rendered indefinite by raising a question or doubt introduced by the limitations following the expression "preferably" because it is subject of more than one interpretation, and one interpretation would render the claim unpatentable over the prior art. In the present instance, the claims recite broad range of molecular weights more than 1000 that has no limited upper end, and also recite narrower ranges of molecular weights.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 6-13, 21, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/48858 ('858), IDS filed 07/24/2006, in view of CA 02426251 ('251), IDS filed 11/13/2009, as evident by the article by Wang et al. "Optimum toughening via biocontinuous blending: toughening of PPO with SEBS and SEBS-g-maleic anhydride", currently provided.

Applicant Claims

Applicant's claim 1 is drawn to a composition comprising one or more hydrogel-forming hydrophilic homopolymers or heteropolymers and one or more amphiphilic block-copolymers comprising hydrophobic polymer blocks being incompatible and

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hydrophilic polymer blocks being compatible with the hydrogel-forming hydrophilic homopolymers or heteropolymers.

Determination of the Scope and Content of the Prior Art

(MPEP §2141.01)

WO '858 teaches pressure sensitive adhesive composition for application to human or animal skin comprising polyvinyl pyrrolidones polymer (PVP) or PVP copolymer, and block copolymer comprising styrene to improve the rate of absorption of water and improve integrity and wet tack of the adhesive composition on wet skin (abstract). PVP has capability to absorb water (page 7, lines 13-16), i.e. hydrogel forming polymer. The composition further comprises hydrocolloid selected from polyethylene glycol, which reads on plasticizer claimed by claim 8 (page 9, line 7).

Ascertainment of the Difference Between Scope the Prior Art and the Claims

(MPEP §2141.012)

Although WO '858 teaches the adhesive composition comprises block copolymer comprising styrene to improve the rate of absorption of water and improve integrity and wet tack of the adhesive composition on wet skin, however, the reference does not explicitly teach amphiphilic block-copolymers comprising hydrophobic polymer blocks and hydrophilic polymer blocks as instantly claimed by claim 1.

CA '251 teaches amphiphilic block copolymer that is suitable for absorbent agents (abstract). The amphiphilic block copolymer has hydrophilic part and

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hydrophobic part that has compatibility with hydrophilic compounds and affinity for hydrophilic products therefore enabling the amphiphilic copolymer for the purpose of use as absorption agents. The block copolymer comprises polystyrene blocks and polyethylene glycol blocks (page 2, lines 25-34; page 8, lines 23-28). The hydrophilic polyethylene glycol blocks have molecular weight (MW) from 200-20,000, with MW of 1000-800 is advantageous, average MW 2000 (page 4, lines 22-26; page 5, lines 1-10). The hydrophobic blocks are Kraton G 1091 (page 4, lines 7-10). Kraton G 1901 has an average molecular weight 7500 in the polystyrene block as evident by Wang et al. (page 38, paragraph 2.1.)

**Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide pressure sensitive adhesive composition for application to human or animal skin comprising polymer or copolymer PVP and block copolymer comprising styrene to improve the rate of absorption of water as taught by WO '858, and replace the block copolymer with amphiphilic block copolymer taught by CA '251. One would have been motivated to do so because WO '858 desired to improve water absorption and because CA '251 teaches that amphiphilic block copolymer has hydrophilic part and hydrophobic part that has compatibility with hydrophilic compounds and affinity for hydrophobic products therefore enabled for the purpose of use as absorption agents. One would reasonably expect formulating pressure sensitive

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adhesive composition for application to human or animal skin comprising polymer or copolymer of PVP and amphiphilic block copolymer that is compatible with hydrophilic product and has affinity to hydrophobic products and has improved absorption properties.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Correspondence

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis A. Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571) 272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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/Isis A Ghali/
Primary Examiner, Art Unit 1611

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